



STATE OF MARYLAND

DHMH

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January 14, 2009

Public Health & Emergency Preparedness Bulletin: # 2009:01 Reporting for the week ending 01/10/09 (MMWR Week #01)

CURRENT HOMELAND SECURITY THREAT LEVELS

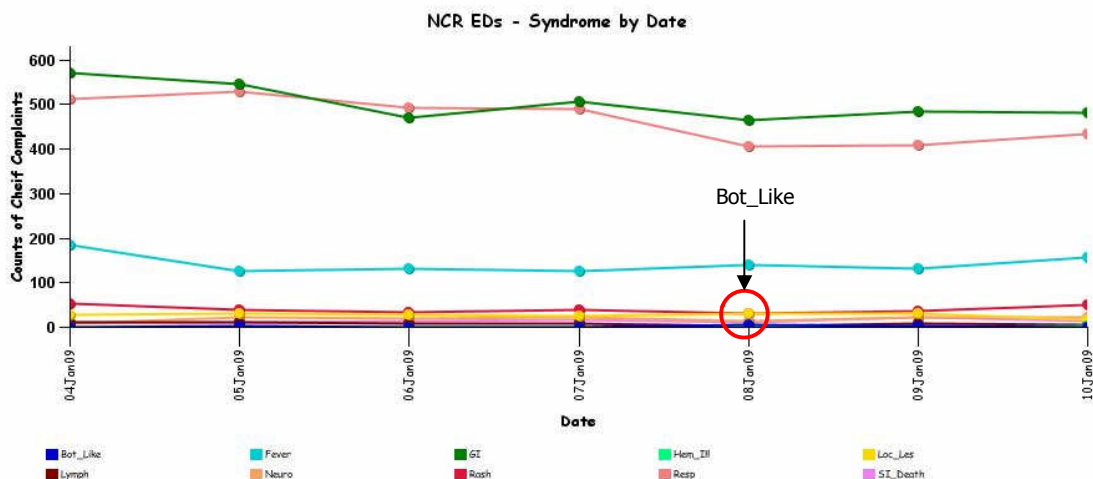
National: Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)
Maryland: Yellow (ELEVATED)

SYNDROMIC SURVEILLANCE REPORTS

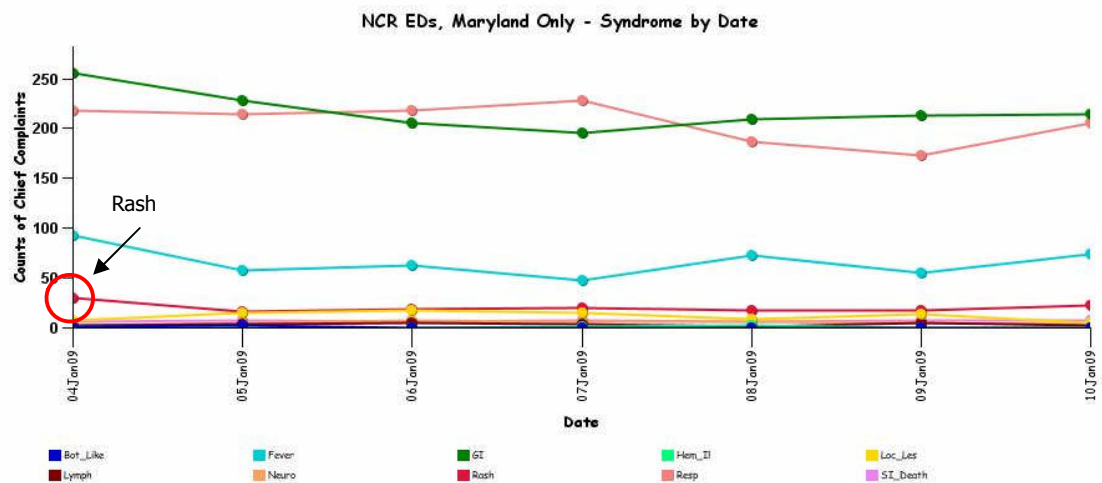
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

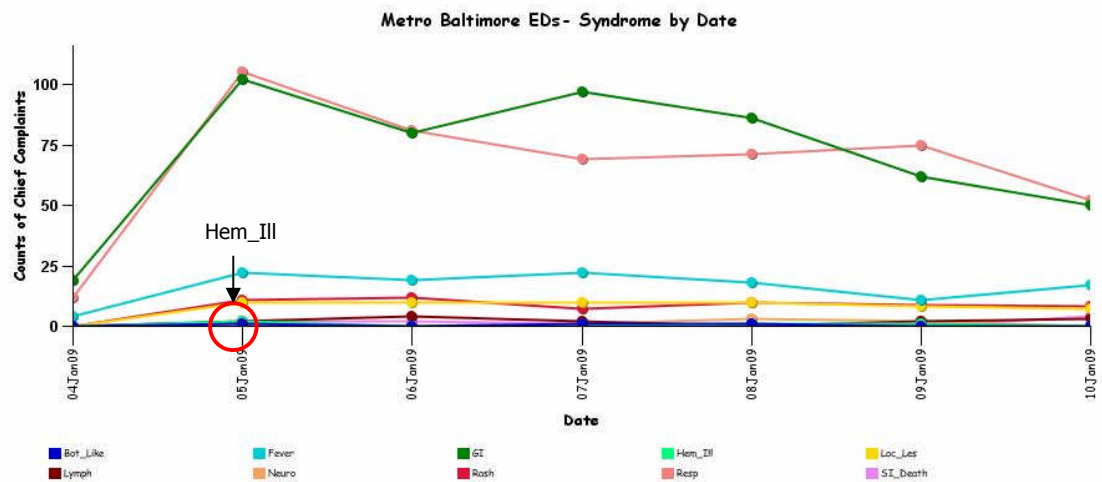
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.

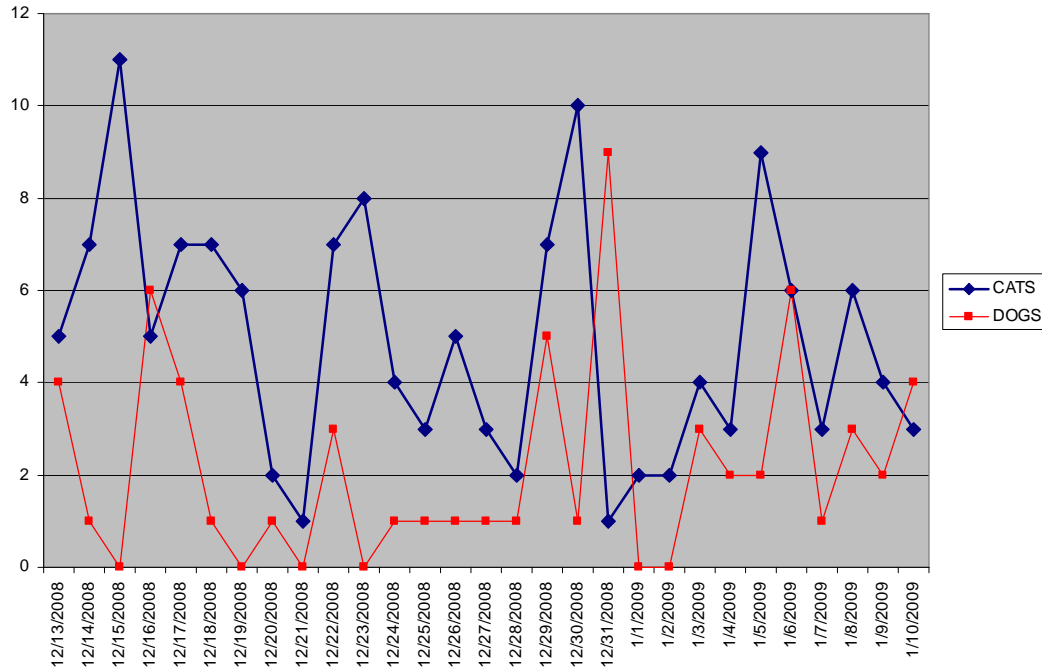


* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

****NOTE: Not all data for Metro Baltimore hospitals was available for January 4, 2009 due to technical issues****

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.

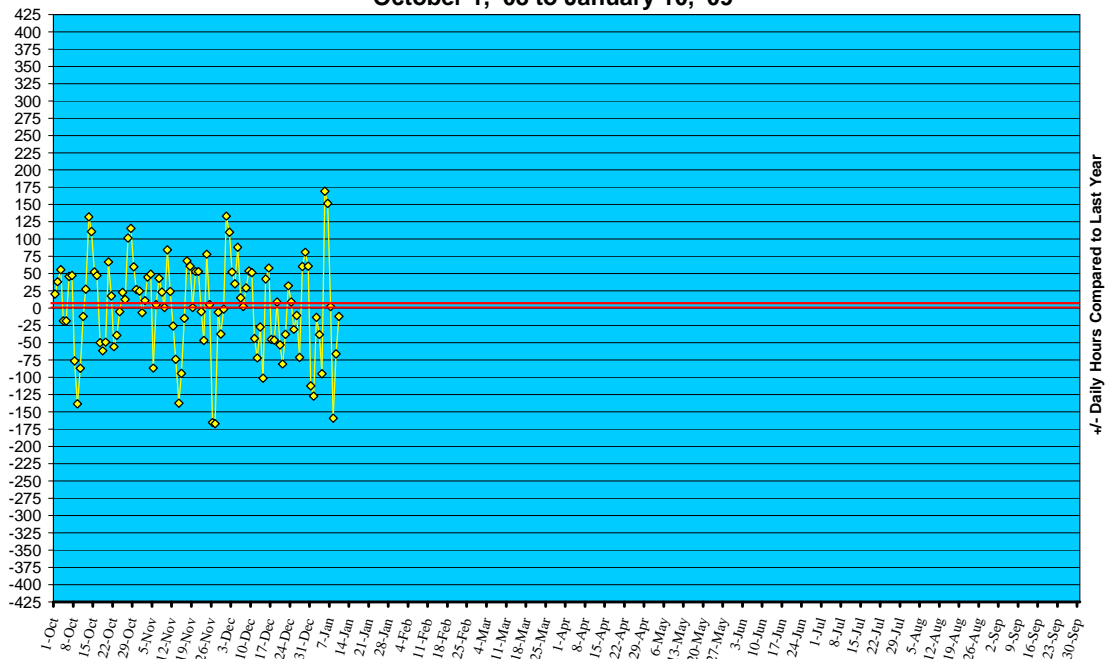
Dead Animal Pick-Up Calls to 311



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08.

**Statewide Yellow Alert Comparison
Daily Historical Deviations
October 1, '08 to January 10, '09**



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in December 2008 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	<u>Aseptic</u>	<u>Meningococcal</u>
New cases (Jan 4 to Jan 10, 2009):	12	0
Prior week (Dec 28, 2008 to Jan 3, 2009):	08	0
Week#01, 2008 (Dec 30, 2007 –Jan 5, 2008):	16	0

21 outbreaks were reported to DHMH during MMWR Week 1 (Jan. 4- Jan. 10, 2009):

19 Gastroenteritis outbreaks

12 outbreaks of GASTROENTERITIS associated with Nursing Homes

5 outbreaks of GASTROENTERITIS associated with Assisted Living Facilities

2 outbreaks of GASTROENTERITIS associated with Hospitals

1 FOODBORNE ILLNESS outbreak

1 outbreak of FOODBORNE GASTROENTERITIS associated with a Restaurant

1 Respiratory illness outbreak

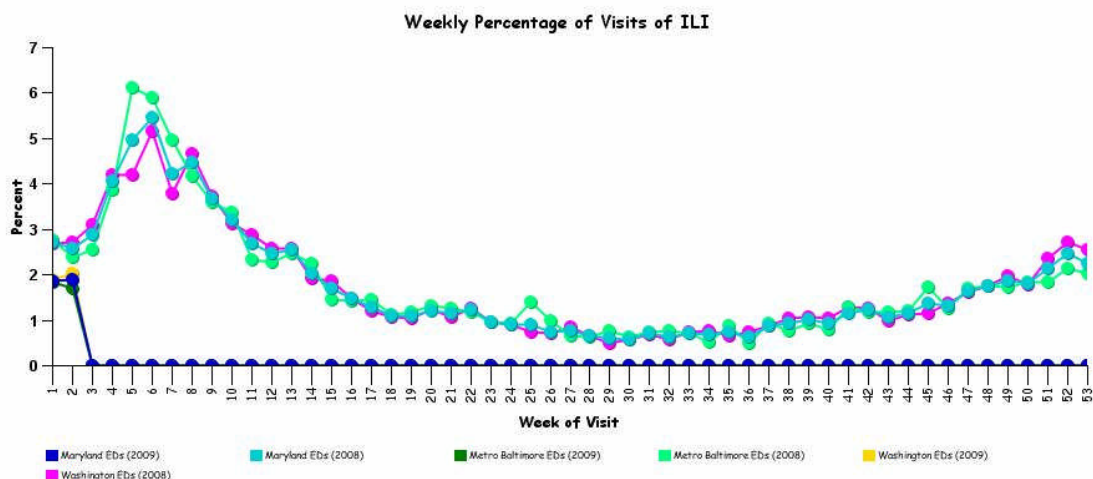
1 outbreak of PNEUMONIA associated with a Nursing Home

MARYLAND SEASONAL FLU STATUS:

Influenza activity in Maryland for Week 01 is LOCAL. During week 01, 36 confirmed cases of influenza were reported to DHMH.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 3/4: No or very little human-to-human transmission/Small clusters with limited human-to-human transmission, suggesting that the virus is not well adapted to humans

US Pandemic Influenza Stage: Stage 0/1: New domestic animal outbreak in at-risk country/Suspected human outbreak overseas

*More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: <http://bioterrorism.dhmm.state.md.us/flu.htm>

WHO update: As of January 07, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 393, of which 248 have been fatal. Thus, the case fatality rate for human H5N1 is about 63%.

AVIAN INFLUENZA, HUMAN (VIET NAM): 09 Jan 2009. The sister of Viet Nam's 1st confirmed bird flu patient of the year [2009] died with similar symptoms last week, and the director of the hospital where she was treated said she probably also had avian flu. "We suspect that it was bird flu that caused her death," said Truong Thi Mau, director of the Ba Thuoc district hospital. "But we can't be 100 percent sure because there was no sample for tests. At the time, we thought her illness was something else," Mau said by telephone from Ba Thuoc, about 150 km (95 miles) south of Hanoi in Thanh Hoa province. Earlier this week, Vietnamese authorities said the 13-year-old girl's younger sister was in hospital with an H5N1 virus infection. Both girls had eaten duck and chicken raised on the family farm, Mau said. The 13-year-old developed a high fever and severe cough on 25 Dec 2008 and died in the district hospital on 2 Jan 2009, Mau said. After her 8-year-old sister was confirmed to be infected with H5N1, about 50 children with flu symptoms were brought in by nervous parents in the area, but tests for avian influenza were negative on all of them, she said. Five Vietnamese people died of bird flu in 2008 out of 6 reported H5N1 infections, all in the north of the country, in the 1st quarter of the year, when cooler temperatures allow the virus to thrive. The H5N1 strain has killed 247 people globally among the 391 confirmed cases since 2003, according to the World Health Organisation (WHO). Before the latest case in Viet Nam, the WHO said Viet Nam had experienced 106 human infections, the 2nd highest after Indonesia among 15 countries with known human cases. Health authorities in Beijing said this week that a 19-year-old woman died of H5N1 after coming into contact with poultry. It was China's 1st case in almost a year. Chinese state media on Thursday [8 Jan 2009] quoted Deng Xiaohong, spokeswoman for the Beijing Health Bureau, as saying the city's bird flu alert would probably be lifted by 12 Jan 2009 if people who had contact with the dead woman did not fall sick themselves. "At present, there is no biological basis for human-to-human transmission, so there is almost no possibility of human-to-human transmission in Beijing. I hope everyone in the city can rest easy," Deng told state television. In China, the agriculture ministry said on Thursday [8 Jan 2009] it had found no bird flu cases amongst poultry in Beijing or areas surrounding the city where the 19-year-old woman had died. In Viet Nam, the authorities have confirmed outbreaks among poultry in 2 areas near Hanoi, including Ba Thuoc, where nearly 8000 poultry had been slaughtered to prevent it from spreading.

AVIAN INFLUENZA (INDIA): 09 Jan 2009. A fresh outbreak of bird flu was reported in Darjeeling Wednesday [7 Jan 2009], prompting the authorities to restart culling operations, an official said. "We have started culling operations at Rangli Ranglikot area of Darjeeling. This time, a total of 7000 poultry will be culled," district magistrate Surendra Gupta told IANS over the telephone. Gupta said the blood samples of dead poultry from the area sent to the High Security Disease Diagnostic Laboratory in Bhopal had tested positive for avian flu. "We got the reports Wednesday [7 Jan 2009] that confirmed that the dead birds had H5N1 virus," Gupta said. About 31 000 poultry have already been culled at Matigara in Siliguri subdivision and Pubang in Takdah of Darjeeling sub-division of the same district after avian flu was confirmed in the areas Saturday [3 Jan 2009]. The development came 18 days after bird flu struck Malda district in the state.

AVIAN INFLUENZA, HUMAN (CHINA): 07 Jan 2008. The Ministry of Health in China has reported a new case of human infection with the H5N1 avian influenza virus. The case is a 19-year old female from Chaoyang District, Beijing. She developed symptoms on 24 Dec 2008, was hospitalized, and died on 5 Jan 2009. The case was confirmed by the national laboratory. The case had contact with poultry prior to her illness. All contacts have been placed under medical observation. All remain healthy to date. Of the 31 cases confirmed to date in China, 21 have been fatal.

NATIONAL DISEASE REPORTS:

SALMONELLOSIS, SEROTYPE TYPHIMURIUM, PEANUT BUTTER (USA): 10 Jan 2009. Health officials in the state of Minnesota said late Friday [9 Jan 2009] that they had found [the same strain] of *Salmonella* bacteria in one brand of peanut butter distributed to schools and hospitals, which could be a source of a salmonellosis outbreak that has struck in 42 states so far. Officials from the Minnesota Department of Health and the Minnesota Department of Agriculture issued a product warning after preliminary laboratory testing indicated the presence of salmonella in a 5-pound container of King Nut brand creamy peanut butter, according to published reports. The product is distributed in Minnesota to long-term care facilities, hospitals, schools, universities, restaurants, delis, cafeterias and bakeries, but is not sold retail in grocery stores. The Minnesota finding, according to the Associated Press, will be confirmed in lab tests to be done early next week. The strain of salmonella has been identified as *Salmonella* [enterica_ serotype] Typhimurium, the most common of the more than 2500 types of salmonella bacteria in the USA. It's often found in uncooked eggs and meats, said officials

with the CDC, who have been investigating the outbreak for several weeks. "Cases are continuing to occur, and it is an ongoing investigation," Dr. Rajal Mody, a CDC Epidemic Intelligence Service officer, said earlier Friday [9 Jan 2009]. "The 1st people began getting ill in September 2008, but it usually takes several weeks before enough cases have been reported to start noticing a possible outbreak." Mody said he suspects a food item, possibly produce or a prepared packaged food. "When you look at the distribution of cases, it does suggest that it could be a mass-distributed food," he said. "This outbreak is on the larger side, but there have been larger outbreaks." (Food Safety Threats are listed in Category B on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

ANTHRAX, HUMAN, BOVINE (KENYA): 10 Jan 2009. The government [of Kenya] has banned the movement of livestock in Embu District [Eastern Province] following the death of a man from anthrax. According to district commissioner Mohammed Maalim, the ban will remain in force indefinitely as the government monitors the spread of the disease. "We have imposed quarantine because of a reported case of anthrax," he said. He warned that anyone found moving their animals from one area to another would be arrested and prosecuted. Speaking to the press in Embu Town, Mr Maalim said there could be an outbreak of the deadly disease and urged residents to take the necessary precautions. The decision to restrict the movement of animals was reached after a crisis meeting between the DC and veterinary officials. "We don't want to take chances with the lives of the people, and that is why we have taken this bold measure," he said. The administrator said all the livestock in the area would be vaccinated against the disease to ensure that it did not spread further. He called on the residents to take their animals for vaccination when the exercise kicks off next week. On Tuesday [6 Jan 2009], a man died a few days after slaughtering an infected cow at Njukiiri village in Manyata Division. The man, 28, fell sick a fortnight later and died on the way to Embu Provincial Hospital. He had joined another 9 villagers who were assisting a local farmer in slaughtering the sick cow. A meat inspector confirmed that the cow was suffering from the deadly disease and ordered it to be disposed of. Following the death, other residents who came into contact with the animal flocked to the hospital for checkups. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

EBOLA (DEMOCRATIC REPUBLIC OF CONGO): 08 Jan 2009. In the Democratic Republic of the Congo (Congo DR) in Western Kasai Province, health officials are trying to contain an Ebola outbreak. The World Health Organization (WHO) says that out of 42 patients, 5 cases of Ebola have been confirmed; 12 others are probable cases, and 25 more are suspected cases of Ebola [hemorrhagic fever]. Gregory Hertl, WHO spokesperson for epidemic and pandemic diseases, spoke from Geneva to VOA News reporter Joe De Capua about how hard it is to diagnose a case of Ebola. In the early phases of the disease, there are actually many diseases which have a similar presentation, which is basically a spike in fever, plus vomiting and diarrhea. It's only in the later stages of Ebola do you start to see the tell-tale hemorrhagic symptoms," he says. Hertl says that the 1st response when a suspected Ebola outbreak is reported is to get health professionals "on the ground." But it's not always easy to do that right away. He says: "Unfortunately, many of these outbreaks occur in extremely remote locations where very few people have access. But if we had people on the ground at the start of this, we would want to isolate suspected cases so that there was no possibility of transmitting the disease onward. We would want to institute proper infection control procedures in hospitals so that no hospital workers [become] infected. We would want to do a laboratory testing to confirm that this was indeed Ebola." The WHO spokesperson says that the WHO and others would also work with the communities to make sure they understand what Ebola is and "what measures they need to take in order to not contract Ebola themselves and to stop the disease from spreading further." There's no treatment for Ebola. Hertl says: "There's no anti-viral medication. There's no vaccine that one can be given beforehand. So, all you can do is hope that the body's defenses will fight off the virus. And we know that, unfortunately, the virus can kill up to 90 percent of the people it infects. It's not only deadly; it's easily transmissible. They can't even touch someone else, because the virus is transmissible even by the touch of the skin," he says. It's been difficult to pinpoint the source of Ebola in the bush or jungle. Hertl says: "It might come from contaminated bushmeat, but we've also seen other routes of transmission, certainly, even more so, more plainly, with Marburg (virus), because Marburg, which is a very close cousin of Ebola, also can be transmitted by bats. If bats urinate on fruit, which is then eaten, or you come in contact with bat feces through one means or another, then the disease can also be transmitted that way. But certainly, yes, one of the 1st ways that we saw Ebola being transmitted was through bushmeat," he says [These are presumed modes of transmission, not yet confirmed unequivocally. - Mod.CP]. It's difficult to educate communities in the bush to avoid the disease, due to its very nature of transmission. In areas where there have been previous outbreaks, communities often know what Ebola is and what steps to take to prevent its spread. "But in any time that Ebola 1st surfaces in an area which has never had it before, that's a big issue," he says. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, HUMAN, BOVINE (ARGENTINA): 08 Jan 2009. A total of 8 adult cattle died suddenly in the last weeks of December 2008 in a farm with 1100 head located in Estacion Alzaga, Gonzales-Chaves Municipality, Province of Buenos Aires. All animals had blood coming out from their natural orifices. On 29 Dec 2008, the veterinarian took a metacarpal sample and sent it to the laboratory looking for a diagnosis. *Bacillus anthracis* was isolated. The culture was susceptible to the usual veterinary antibiotics but it was resistant to Trimethoprim-Sulfamethoxazole. Nowadays it is the end of Argentinean spring, and this season has been particularly dry in the Province of Buenos Aires. The grazing is very short, less than one fist in height. The animals were not vaccinated, and the farm had no past history of cases of anthrax. Two ranch hands who had skinned the carcasses are currently receiving medical therapy, since they had cuts on their hands. To date the carcasses have not been disposed of in the standard manner. [Covered in lime and a tarpaulin, and left for 9 months.] (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

UNDIAGNOSED ILLNESS (INDIA): 08 Jan 2009. The [Manipur] State Authority has yet to confirm the mysterious disease that spread among the villagers of Churachandpur district today [Thu 8 Jan 2009]. The sudden deaths of 17 chickens and subsequent hospitalisation of 32 villagers, mostly women, with a mysterious illness since Sunday [4 Jan 2009] has evoked a bird flu scare in the district, particularly in the affected Misao Lhahvom village, 72 km south of the state capital. Though experts confirmed that there's no bird flu [in birds in the area], they're still collecting blood samples of the hospitalized villagers to verify the disease. Close on the heels of Additional Director of the state health services Dr Th Bhubolchandra's visit to hill district headquarters on Wednesday [7 Jan 2009], a team headed by State Program Officer Nimaichand from the state vector-borne diseases [office] came down to Churachandpur town today [8 Jan 2009]. "They collected blood samples of the patients besides visiting the village today," a villager said. According to an employee of Churachandpur district hospital, most of the patients admitted there complained of high fever followed by unconsciousness. Presently, 28 patients, mostly women, were given treatment at the hospital after 10 of them were discharged, he added. Locals believe that the cause of the disease might be related to food poisoning in the recent Christmas celebration. However, Dr Motilal, director of state health services, said it was [a] viral fever. However, there is no report confirming the details of the disease that hit the remote hill villages [up to the time of] the filing of this report. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://bioterrorism.dhmm.state.md.us/>

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

CDC has issued interim guidelines for the use of Oseltamivir (Tamiflu) in influenza cases. The guidelines can be found at <http://www.cdc.gov/flu/professionals/antivirals/index.htm>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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